



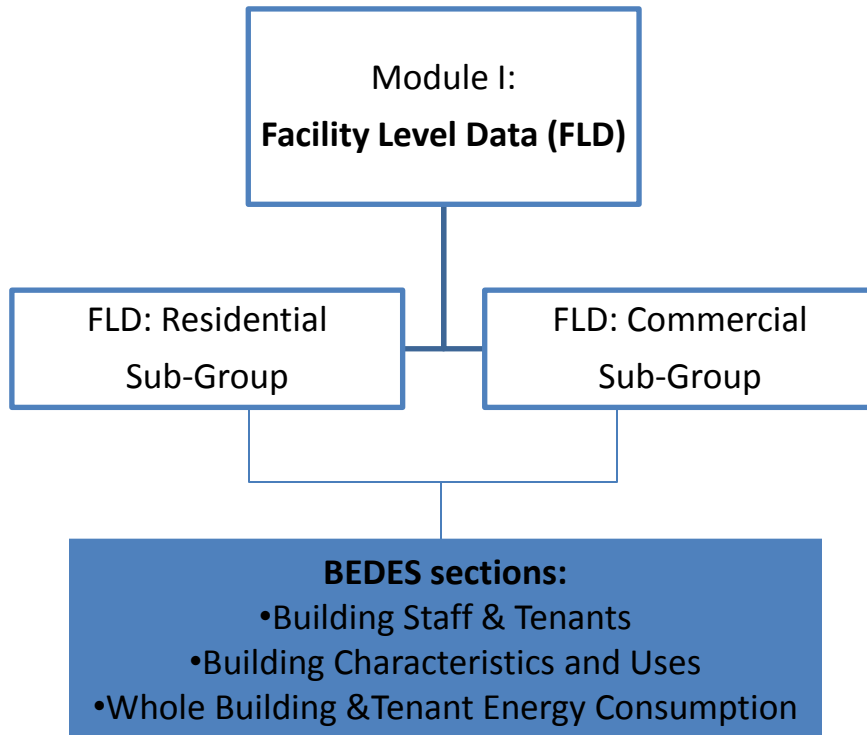
Environmental Energy Technologies Division

Lawrence Berkeley National Laboratory

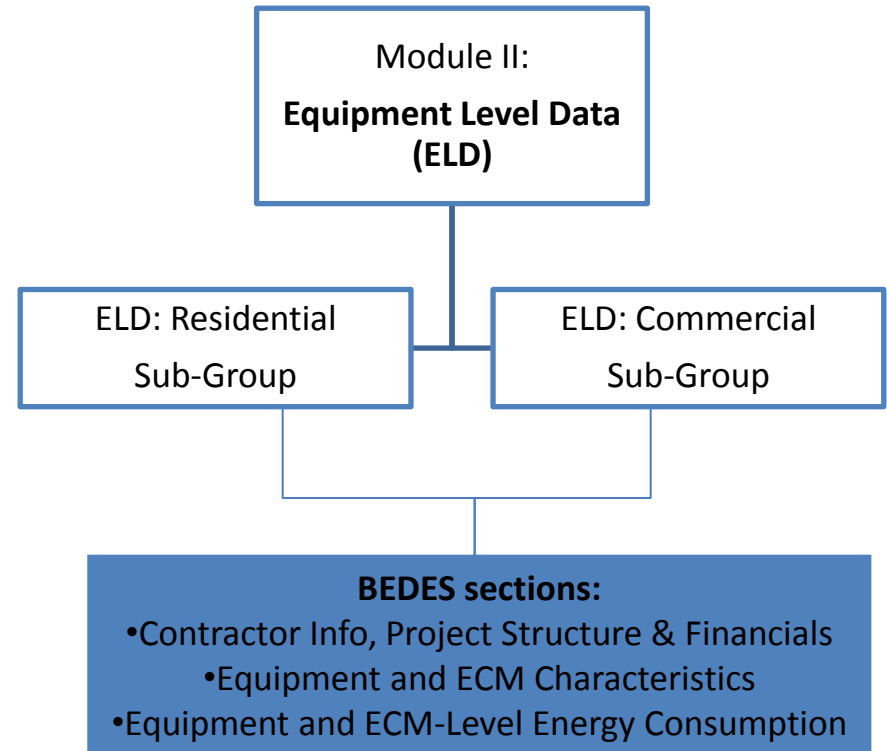
BEDES Technical Sub-Group: Working Group Progress

Dr. Norman Bourassa, LBNL
January 22, 2013

January-February



March-June



Sub-Group Module 1 Meetings Facility Level Data

Topics	Commercial Sub-Group	Residential Sub-Group
Site, Facility	January 7	January 9
Mtgs. CANCELED/Moved	January 28	January 27
Energy, Admin, & PII	February 11	February 13
<i>Note: Enumerations scheduled for 2/11 & 13, moved to TWG Agendas; Energy, Admin, & PII moved from Jan Sub-Groups to Feb.</i>		
<i>Note: All meetings via phone</i>	1:00-3:30 EDT	

Sub-Group Module 2 Meetings Equipment Level Data

Topics—Draft (subject to change)	Commercial Sub-Group	Residential Sub-Group
HVAC, Controls, Opps	March 11	March 13
Lighting & Envelope	April 7	April 9
Internal & Process Loads	May 6	NA
Plugs, DHW, & Appliance Loads	NA	May 8
Energy Generation, Storage & Other	June 3	June 5
<i>Note: All meetings via phone</i>	<i>1:00-3:30 EDT</i>	

- The Commercial and Residential Sub-Groups for both Module 1 (Facility-Level Data) and Module 2 (Equipment-Level Data) will be providing feedback and recommendations through the TWG
- As such, any Sub-Group feedback and recommendations to LBNL will not be considered final until reviewed and supported by the TWG
- As a practical matter, TWG will likely simply support any consensus items from Sub-Groups and attempt to resolve any matters where Sub-Groups couldn't reach a consensus

- **Climate Zone** – Add CA and Bonneville climate zones (also look into availability of comparable international CZs); Don't need weather data since zip code is already in BEDES—no one disagreed
- **School District** – This field does not need to be moved. Change field name to **School District ID** and data type to constrained list of codes
- **Tax Floor Area** – Keep and rename **Site Tax Floor Area** to differentiate between tax floor area at the site vs. the facility level
- **Complex Type** – Keep at Site level and: From C1: Add “Commercial Mixed Use” and “Mixed Use with Multifamily” to the type list;
-From R1: Add “Neighborhood/Home-Owner Association” and “Co-operative”
- **Elevation, Latitude, Longitude** – Keep fields because zip code does not deliver exact values.

- **Additional Fields:**
 - Lot Area
 - Number of Lots
 - Current Use
 - Possible Use
 - Radon Zone
 - Termite Zone
 - Hurricane Zone
 - Flood Zone
 - Earthquake Zone
 - Distance to Bus Stop
 - Distance to Freeway
 - Distance from Train
 - Walking Score
 - Walking Score Source

- **Primary Facility Type** – Change types labeled “-Uncategorized” to “-Unknown” and move after “-Other”
 - Change “Nursing Home” to “Health Care – Skilled Nursing Facility”
 - Consider a field for SIC or NEICS codes also or instead
- **Surroundings**– Change field name to **Abutment** and add “Attached from Above” and “Attached from Below” types
- **Building Certification Type** – Expand to include: Energy Asset Score, Living Building, MBIA 100, Enterprise Green Communities, CA-CHPS, Washington State Sustainable Schools Protocol, Green Globe, Other:

- **Year Permitted** – New field to capture code compliance year and certification version

- **Average Weekly Operating Hours** – Break up into two fields to address operating vs. occupied hours.
 - For both have fields for more detailed scheduled info based on days of the week (not as granular as holidays hours)
 - Link Number of Occupants with schedules
- **Complete Total Energy** – Ok at facility level. Need more flags fields for data accuracy such as gaps, unaligned data, etc.
- **Gross Floor Area** – Use ASHRAE's definition and BOMA's for Rentable and Net Floor Area.
- **Day-lit Floor Area** – New field to define the floor area that is lit by natural daylight.

- **Residential Facility Type** – Add “Barracks” and “Other Military Housing” to list of types
- **Orientation** – Change field name to **Cardinal Direction** and adjust definition to use front of facility as the reference point.
- **Azimuth** – New field to capture the degrees from North (clockwise).
- **Finished Floor Area** – New field to capture floor area of a residence that are meant for year round access and occupancy. Use HPXML’s definition.
- **Resident Population Type** – Add “Cooperative Housing,” “Co-Housing,” and “Halfway Home” to list of types.
- **Federal Real Property ID** – Keep this field in as it may be relevant to military housing.

- **Building Certification Type** – Expand type list to include:
 - WaterSense
 - Indoor airPLUS
 - NGBS ICC-700
 - PHIUS+
 - Challenge Home
 - Passive Home
 - Living Building Challenge
 - ENERGY STAR Certified Home
- **Additional Residential Fields:**
 - Builder Name
 - Builder Model
 - Association information (name, phone, fee, etc.)
 - Garage Parking Spaces
 - Space Above Garage
 - Attached Garage (yes or no)
 - RV Parking Dimensions

- Facility:
 - **Footprint Shape** – Should BEDES capture more granular geometric dimensions of facilities?
 - **Metering Configuration** – Tabled to the next subgroup meeting dealing with Energy Use and Time Series tables.
- Activity Area:
 - **Connected Load** – Field comes from ESPM to capture connected load to specific activity areas. What about capturing peak load info?
 - Residential **Activity Area** – Is there a need to provide activity areas for Residential Facility to capture specific space-level information regarding common areas, recreational space, manager's office, etc.?